

Notice of Allowability

Application No.	Applicant(s)	
09/780,678	BRAUN ET AL.	
Examiner	Art Unit	
Brian R. Gordon	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 9-23-03.
2. The allowed claim(s) is/are 1-20 and 23.
3. The drawings filed on 2-12-01 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) The translation of the foreign language provisional application has been received.
6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No. _____.
 - (b) including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1 <input type="checkbox"/> Notice of References Cited (PTO-892)	5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____.
3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____	7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment
4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance
	9 <input type="checkbox"/> Other

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Sanfran on January 15, 2004.

The application has been amended as follows:

In the claims:

Cancel claims 21-22.

Amend claims 1 and 9 as given below:

1. (Currently Amended) A method for detecting the type of replaceable piston-cylinder unit mounted in a pipetting or dosing apparatus by sampling of a code marking on a free end of a head of a piston rod of the piston-cylinder unit w1114 a detection device of the apparatus, comprising the steps of:

- a) inserting the piston-cylinder unit in the apparatus;
- b) fixing mounting the cylinder of the piston-cylinder unit in the apparatus;
- c) coupling the piston rod head with the apparatus;
- d) detecting the presence of the piston-cylinder unit in the apparatus;

and, following the above mentioned sequence of steps comprising the steps of:

- e) generating a relative movement between the piston rod head and the detection

device and detecting a reference point on the piston head with the detection device; and
f) generating a relative movement between the piston rod head and the detection
device and detecting a code marking on the piston rod head to determine the type of
piston-cylinder unit mounted in the apparatus;
wherein the steps e) and f) occur in any time sequence.

9. (Currently Amended) A pipetting or dosing system, comprising:
a pipetting or dosing apparatus;
a removably mountable piston-cylinder unit formed as a replaceable part, and which
comprises a piston with a piston rod and a piston rod head which is provided with a
code marking specifying the type of piston-cylinder unit and a reference point detectable
from laterally of the piston;
a detection device for automatically detecting the code marking and the reference
point of the piston when the piston-cylinder unit is mounted on the apparatus;
a drive device for generating relative movement between the piston rod head and the
detection device and operable to enable for enabling the reference point and the code
marking to be position for detection by the detection device; and an evaluating unit
operable to evaluate for evaluating the code marking with respect to the reference point.

Allowable Subject Matter

2. Claims 1-20 and 23 allowed.

3. The following is an examiner's statement of reasons for allowance: Schurbrouck, the closest prior art, does not teach nor fairly suggest the method and device of the instant claims: A method for detecting the type of replaceable piston-cylinder unit mounted in a pipetting or dosing apparatus by sampling of a code marking on a free end of a head of a piston rod of the piston-cylinder unit w1114 a detection device of the apparatus, comprising the steps of:

- a) inserting the piston-cylinder unit in the apparatus;
- b) mounting the cylinder of the piston-cylinder unit in the apparatus;
- c) coupling the piston rod head with the apparatus;
- d) detecting the presence of the piston-cylinder unit in the apparatus;

and, following the above mentioned sequence of steps comprising the steps of:

- e) generating a relative movement between the piston rod head and the detection device and detecting a reference point on the piston head with the detection device; and
- f) generating a relative movement between the piston rod head and the detection device and detecting a code marking on the piston rod head to determine the type of piston-cylinder unit mounted in the apparatus;

wherein the steps e) and f) occur in any time sequence.

A pipetting or dosing system, comprising:

- a pipetting or dosing apparatus;
- a removably mountable piston-cylinder unit formed as a replaceable part, and which

comprises a piston with a piston rod and a piston rod head which is provided with a code marking specifying the type of piston-cylinder unit and a reference point detectable from laterally of the piston; a detection device for automatically detecting the code marking and the reference point of the piston when the piston-cylinder unit is mounted on the apparatus; a drive device for generating relative movement between the piston rod head and the detection device and operable to enable the reference point and the code marking to be position for detection by the detection device; and an evaluating unit operable to evaluate the code marking with respect to the reference point.

In particular the prior art does not disclose a piston rod head that has both a reference point and code marking thereon, which are detected by detectors positioned laterally in reference to the piston head. The prior art also fails to teach a method in which the reference point and code marking may be detected in order after the piston rod head and cylinder are mounted and coupled in the apparatus.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

brg


Jill Warden
Supervisory Patent Examiner
Technology Center 1700